

## AMENDMENTS TO THE SPECIFICATION

Before claim 1 line 1 please insert TITLE OF THE INVENTION

After page 1 line 3 please insert FIELD OF THE INVENTION

After page 1 line 4 please insert DESCRIPTION OF RELATED ART

After page 2 line 7 please insert BRIEF SUMMARY OF THE INVENTION

Please amend the paragraph at page 2 lines 11 – 21 to read as follows.

Accordingly [[in one non-limiting embodiment of]] the present invention [[there is provided]] provides apparatus for measuring the strength of a person's respiratory muscles, which apparatus comprises a mouthpiece for the person, a flow transducer, a pressure transducer, a variable orifice valve, a motor for operating the variable orifice valve, and [[microprocessor control means]] a microprocessor controller, the microprocessor [[control means]] controller being such that it [[is able to control]] controls the motor to cause the variable orifice valve to vary its orifice size [[and thereby to maintain]] in response to at least one of flow and pressure signals obtained consequent upon the person breathing into the mouthpiece, whereby the orifice size maintains a constant predetermined pressure and [[enable]] enables measurement of the flow rate generated by the person, or [[to maintain]] the orifice size maintains a constant predetermined flow rate and [[enable the]] enables measurement of the pressure generated by the person.

Please amend the three paragraphs on page 3 lines 1 – 23 to read as follows.

Preferably, the apparatus of the invention will be used such that the microprocessor [[control means]] controller maintains different constant predetermined pressures, and measures the flow rate generated by the person at these constant predetermined pressures. If desired however, the apparatus of the present invention may be used such that the microprocessor [[control means]] controller maintains different predetermined flow rates and measures the pressure generated by the person. Either way, a maximum inspiratory pressure curve can be built up, and weak parts of the person's respiratory muscles can be seen from the curve. Corrective respiratory exercises can then be prescribed to strengthen any weak range or ranges of the respiratory muscles. For persons with weak respiratory muscles, the variable orifice will generally be small for the maximum inspired flow rate at a chosen pressure. For persons with strong respiratory muscles, the variable orifice will generally be large for the maximum inspired flow rate at a chosen pressure. Various exercises can be prescribed for persons with weak respiratory muscles over various ranges in order to improve the strength of the respiratory muscles over these ranges.

The apparatus may include a control circuit, the flow transducer being connected to the control circuit, the pressure transducer being connected to the variable orifice valve and to the control circuit, and the control circuit being connected to the microprocessor [[control means]] controller.

The microprocessor [[control means]] controller may comprise a microprocessor circuit, display means, and a keypad.

After page 5 line 16 please insert BRIEF DESCRIPTION OF THE DRAWINGS

Before page 6 line 1 please insert DETAILED DESCRIPTION OF THE DRAWINGS.

Please amend the paragraph at page 6 lines 1 – 12 to read as follows.

Referring to Figures 1 and 2, there is shown apparatus 2 for measuring the strength of a person's respiratory muscles. The apparatus 2 comprises a mouthpiece 4 for [[being inhaled through on by]] the person, a variable orifice valve arrangement 6 and a microprocessor [[control means]] controller 8. The variable orifice valve arrangement 6 comprises a variable orifice valve 10 and a motor 12 for operating the variable orifice valve 10. The microprocessor [[control means]] controller 8 is such that [[it is able to control]] controls the motor 12 to cause the variable orifice valve 10 to vary its orifice size [[and thereby to maintain]] in response to at least one of flow and pressure signals obtained consequent upon the person breathing into the mouthpiece, whereby the orifice size maintains a constant predetermined pressure and [[enable]] enables the measurement of the flow rate generated by the person, or [[to maintain]] the orifice size maintains a constant predetermined flow rate and [[enable]] enables the measurement of the pressure generated by the person.

Please amend the paragraph at page 6 lines 16 – 17 to read as follows.

The constant respiratory pressure transducer 6 is connected to the microprocessor [[control means]] controller 8 by a lead 14 as shown in Figure 1.

Please amend the paragraph at page 7 lines 10 – 15 to read as follows.

As shown in Figure 2, the flow transducer 18 is connected to the control circuit 20. The pressure transducer 22 is connected to the variable orifice valve 10 and to the control circuit 20. The control circuit 20 is connected to a microprocessor circuit 24 of the microprocessor [[control means]] controller 8. The microprocessor circuit 24 is also connected to display means 26 and a keypad 28.